Listing of the Claims

1. (Previously presented) A method, comprising:

operating in a multiple input, multiple output (MIMO) mode by a wireless network device of a wireless network, the wireless network including at least one transmitter device and a plurality of receiver devices, the wireless network device being one of the receiver devices; and

in the event of a predetermined condition, the wireless network device switching from operating in the MIMO mode to operating in a spatial division, multiple access (SDMA) mode.

2. (Original) A method as claimed in claim 1, wherein the predetermined condition includes a latency value exceeding a predetermined value.

3. (Original) A method as claimed in claim 1, wherein the predetermined condition includes a throughput value being below a predetermined value.

4. (Original) A method as claimed in claim 1, wherein the predetermined condition includes a number of collisions exceeding a predetermined value.

5. (Previously presented) A method as claimed in claim 1, wherein the predetermined condition includes a desire to obtain a higher spectral efficiency than a spectral efficiency obtained by operating in a MIMO mode.

6. (Previously presented) A method as claimed in claim 1, wherein the predetermined condition includes a number of the receiver devices exceeding a predetermined value.

7. (Previously presented) A method, comprising:

operating in a spatial division, multiple access (SDMA) mode by a wireless network device of a wireless network, the wireless network including at least one transmitter device and a plurality of receiver devices, the wireless network device being one of the receiver devices; and

in the event of a predetermined condition, the wireless network device switching from operating in the SDMA mode to operating in a multiple input, multiple output (MIMO) mode.

8. (Original) A method as claimed in claim 5, wherein the predetermined condition includes a spectral efficiency per user being below a predetermined value.

9. (Original) A method as claimed in claim 5, wherein the predetermined condition includes a data rate being below a predetermined value.

10. (Previously presented) A method as claimed in claim 5, wherein the predetermined condition includes a desire to obtain a higher data rate for at least one user than a data rate obtained for the at least one user by operating in a SDMA mode.

11. (Previously presented) A method as claimed in claim 5, wherein the predetermined condition includes a desire to obtain a higher quality of service for at least one user than the a quality of service obtained by operating in a SDMA mode.

12. -14. (Cancelled)

15. (Previously presented) An article, comprising:

a storage medium having stored thereon instructions that, when executed by a computing platform, result in adaptive switching between a multiple input, multiple output (MIMO) mode and a spatial division, multiple access (SDMA) mode by:

operating in a MIMO mode, the computing platform being at least a part of a wireless network device of a wireless network, the wireless network including at least one transmitter device and a plurality of receiver devices, and the wireless network device being one of the receiver devices; and

in the event of a predetermined condition, the wireless network device switching from operating in the MIMO mode to operating in a SDMA mode.

16. (Original) An article as claimed in claim 15, wherein the predetermined condition includes a latency value exceeding a predetermined value.

17. (Original) An article as claimed in claim 15, wherein the predetermined condition includes a throughput value being below a predetermined value.

18. (Original) An article as claimed in claim 15, wherein the predetermined condition includes a number of collisions exceeding a predetermined value.

19. (Previously presented) An article as claimed in claim 15, wherein the predetermined condition includes a desire to obtain a higher spectral efficiency than a spectral efficiency obtained by operating in a MIMO mode.

20. (Previously presented) An article as claimed in claim 15, wherein the predetermined condition includes a number of the receiver devices exceeding a predetermined value.

21. (Previously presented) An article, comprising:

a storage medium having stored thereon instructions that, when executed by a computing platform, result in adaptive switching between a multiple input, multiple output (MIMO) mode and a spatial division, multiple access (SDMA) mode by:

operating in a SDMA mode, the computing platform being at least a part of a wireless network device of a wireless network, the wireless network including at least

one transmitter device and a plurality of receiver devices, and the wireless network device being one of the receiver devices; and

in the event of a predetermined condition, the wireless network device switching from operating in the SDMA mode to operating in a MIMO mode.

22. (Original) An article as claimed in claim 21, wherein the predetermined condition includes a spectral efficiency per user being below a predetermined value.

23. (Original) An article as claimed in claim 21, wherein the predetermined condition includes a data rate being below a predetermined value.

24. (Previously presented) An article as claimed in claim 21, wherein the predetermined condition includes a desire to obtain a higher data rate for at least one user than a data rate obtained by operating in a SDMA mode.

25. (Previously presented) An article as claimed in claim 21, wherein the predetermined condition includes a desired higher quality of service for at least one user.

26.-28. (Cancelled)

29. (Previously presented) An apparatus, comprising:

a transceiver to receive signals from a transmitter device of a wireless network, the wireless network including the transmitter device and a plurality of receiver devices, the apparatus being at least a part of one of the receiver devices;

at least two or more omnidirectional antennas to couple to said transceiver; and a baseband processor to couple to said transceiver, wherein said baseband processor and said transceiver switch from a multiple input, multiple output (MIMO) mode to a spatial division, multiple access (SDMA) mode under a first condition, and switch from a SDMA mode to a MIMO mode under a second condition.

30. (Previously presented) An apparatus as claimed in claim 29, wherein the first condition includes at least one of a higher latency, a lower throughput, a higher number of retransmits, and a higher number of receiver devices than a latency, throughput, retransmits, and number of receiver devices, respectively, obtained through the SDMA mode.

31. (Previously presented) An apparatus as claimed in claim 29, wherein the second condition includes at least one of a lower signal-to-noise ratio, a higher bit error rate, a lower spectral efficiency, a desired higher data rate for at least one receiver device, a desired higher quality of service for at least one receiver device, and a lower number of receiver devices than what can be obtained through the MIMO mode.